

**Focus . . . Managed Care (MC+) in Medicaid Population**

Managed Care, or MC+, was introduced into the Missouri Medicaid population beginning September 1, 1995 in the Eastern Region (St. Louis City, St. Louis County, Franklin, Jefferson, and St. Charles counties). Since that time the Missouri Department of Health has been tracking a series of maternal and child health indicators to determine what effect managed care may have had on the health status of the Medicaid population. Currently about 60 percent of Missouri Medicaid births occur in managed care supported regions. (See Map 1) The rest of the state still operate as fee-for service areas.

Managed care was designed to reduce spiraling health care costs through the use of a primary care provider who serves as a gatekeeper for enrollees' access to specialty and inpatient services. Although concerns have been raised that these cost-control efforts may jeopardize the health of the poor, others argue that these programs may improve access to, and continuity of, care by locking in beneficiaries to one identified primary care provider who retains responsibility for assuring continuous, comprehensive care.

In the Missouri Medicaid population, managed care is used primarily by children and women of child bearing age and that is why we have focused on maternal and child health indicators. Missouri operates a statewide MC+ quality assessment and improvement committee made up of Managed Care Plan members, physicians, nurses and others interested in health care management. This committee has developed a set of indicators for monitoring health status as shown in Table 1.

As shown in Table 1, the Medicaid population has shown an improvement for most of the maternal and child health indicators since implementation of managed care. The percentage of Medicaid births whose mothers began prenatal care in the first trimester has steadily improved since 1994 from 71.9 percent to 76.2 percent in 1998. The rate of inadequate prenatal care decreased from 23.9 percent in 1994 to 18.8 percent in 1998. Inadequate prenatal care is defined as care beginning after the first four months of pregnancy or fewer than five visits for pregnancies less than 37 weeks of gestation or fewer than eight visits for pregnancies of 37 weeks or more gestation.

The rate of smoking during pregnancy among Medicaid births has shown little change since 1994 while the rate of Medicaid mothers on WIC has increased from 79.8 percent in 1994 to 81.5 percent in 1998. Family planning indicators (spacing less than 18 months since last live birth and repeat teen births) both showed steady reductions from 1994 to 1998. Asthma hospitalizations under age 18 decreased by 13.4 percent from 1994 to 1997.

By comparison, nearly all of these indicators (except repeat teen births and asthma hospitalizations) also show improvements for the non-Medicaid population. Trends are stronger for the Medicaid population in prenatal care and family planning indicators. Smoking reductions and WIC participation improvements are stronger in the non-Medicaid population. Because of the relatively poor Medicaid population, the indicators are generally much worse for the Medicaid population. For example, the rates of inadequate prenatal care, smoking during pregnancy, and asthma hospitalizations under age 18 are three times higher for Medicaid births than for non-Medicaid births.

Each of the seven key birth indicators is tracked for each of the MC+ regions shown in Map 1. Most of the indicators follow fairly similar patterns across regions. However, greatest reductions in asthma hospitalizations have occurred in the Eastern Region, while increases occurred in the other three MC+ regions. Eastern Region has also been in managed care operations the longest.

While these seven are the key indicators being tracked by the Missouri Department of Health, other indicators are also being tracked. These include low birth weight (under 2,500 grams), C-sections, VBACs (vaginal births after C-sections), births under age 18, very low birth weight (under 1,500 grams) not delivered at level III hospitals, average maternal and behavioral health length of stays, emergency room visits, preventable hospitalizations, and hysterectomies. Many of the indicators are taken from HEDIS (Health Plan Employer Data and Information Set) developed by the National Committee for Quality Assurance.

In summary, the key maternal and child health indicators do not show any great trend shifts since Medicaid managed care went into effect in September 1995. Generally trends previously established are continuing as the quality of care appears to be remaining stable. The Maternal and Child Health subcommittee for Quality Assessment and Improvement is developing strategies for improving health outcomes measured by the seven key indicators and will share their findings with each of the plans when they are developed. The Missouri Department of Health will continue to monitor trends in these key indicators to help ensure that quality health care continues in the Medicaid population.

Table 1

Trends in Missouri Medicaid Quality Indicators: Missouri 1994 - 1998						
	1994	1995	1996	1997	1998	Percent Change 1994-1998
<i>MEDICAID</i>						
						(Prov.)
Prenatal Care Began 1st trimester	71.9%	74.7%	75.8%	76.1%	76.2%	6.0
Inadequate prenatal care	23.9%	21.3%	20.2%	19.6%	18.8%	-21.4
Smoking during pregnancy	32.3%	31.8%	31.8%	32.3%	32.0%	-1.0
Spacing <18 mos since last birth	18.2%	15.3%	15.0%	15.7%	15.5%	-14.9
Repeat teen births	6.7%	6.4%	6.2%	5.9%	6.1%	-9.4
Percent of prenatals on WIC	79.8%	80.9%	82.5%	82.8%	81.5%	2.1
Asthma hospitalizations <18 per 1,000	5.7%	4.7%	4.0%	5.1%	NA	-13.4*
Proportion on Managed Care(MC+)	0.0%	7.3%	36.1%	60.9%	59.8%	
<i>Non-MEDICAID</i>						
Prenatal Care Began 1st trimester	92.0%	92.2%	92.0%	92.3%	92.4%	0.4
Inadequate prenatal care	6.5%	6.5%	6.7%	6.3%	6.1%	-6.7
Smoking during pregnancy	12.6%	12.1%	11.4%	11.3%	10.9%	-13.6
Spacing <18 months since last birth	7.9%	7.6%	7.9%	7.8%	7.5%	-5.7
Repeat teen births	0.7%	0.7%	0.7%	0.7%	0.8%	16.8
Percent of prenatals on WIC	11.1%	11.5%	12.9%	13.7%	14.2%	28.9
Asthma hospitalizations <18 per 1,000	1.4%	1.4%	1.2%	1.4%	NA	2.6*
* 1994-1997 percent change						
Note: The source of all indicators is the Missouri birth file, with the exception of asthma hospitalizations <18, whose source is the Missouri patient abstract file.						

### Provisional Vital Statistics for November 1998

**Live births** in November were virtually the same as the previous November (5,466 in 1998 vs. 5,445 in 1997).

Cumulative births for the 11- and 12-month periods ending with November both show increases, 0.7 percent for the 11-month period and 4.1 percent for the 12-month period.

**Deaths** increased in November as 4,509 Missourians died compared with 4,078 one year earlier. However, cumulative deaths for 11- and 12-month periods ending with November both show decreases.

The **Natural increase** for November was 957 (5,466 births minus 4,509 deaths). Cumulative natural increase data for the 11- and 12-month periods ending both show increases in 1998.

**Marriages** increased in November, but decreased for the cumulative 11- and 12-month periods ending with November.

**Dissolutions of marriage** increased for all three time periods shown below. The marriage to divorce ratio for the 12 months ending with November decreased from 1.73 to 1.67.

**Infant deaths** increased slightly for January-November from 7.8 per 1,000 live births to 8.0.

**Provisional Resident Vital Statistics for the State of Missouri**

Item	November				Jan. Nov. cumulative				12 months ending with November				
	<u>Number</u>		<u>Rate*</u>		<u>Number</u>		<u>Rate*</u>		<u>Number</u>		<u>Rate*</u>		
	<u>1997</u>	<u>1998</u>	<u>1997</u>	<u>1998</u>	<u>1997</u>	<u>1998</u>	<u>1997</u>	<u>1998</u>	<u>1997</u>	<u>1998</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
Live Births	5,445	5,466	11.9	11.5	67,678	68,182	13.7	13.7	72,077	75,085	13.6	13.4	13.8
Deaths	4,078	4,509	8.9	9.5	49,728	49,054	10.1	9.9	54,473	54,164	10.0	10.1	10.0
Natural increase	1,367	957	3.0	2.0	17,950	19,128	3.6	3.8	17,604	20,921	3.6	3.3	3.8
Marriages	2,937	3,934	6.4	8.2	41,087	40,844	8.3	8.2	44,110	43,569	8.3	8.2	8.0
Dissolutions	1,931	2,247	4.2	4.7	23,286	23,689	4.7	4.8	25,500	26,023	4.7	4.7	4.8
Infant deaths	42	39	7.7	7.1	525	547	7.8	8.0	570	590	7.7	7.9	7.9
Population base (in thousands)	...	...	5,402	5,440	...	...	5,402	5,440	...	...	5,361	5,398	5,436

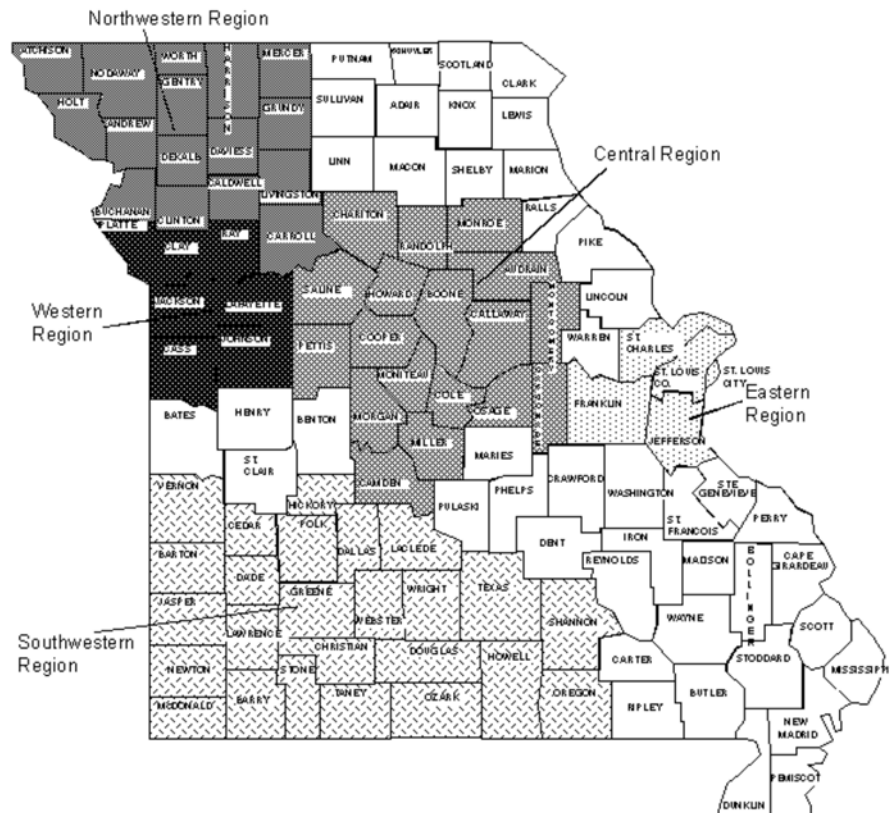
\*Rates for live births, deaths, natural increase, marriages and dissolutions are computed on the number per 1000 estimated population. The infant death rate is based on the number of infant deaths per 1000 live births. Rates are adjusted t o account for varying lengths of monthly reporting periods.

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# Map 1

## Managed Care Regions



MC+ Area	Implementation Date
	9/1/95
	3/1/96
	1/1/97
	1/1/97, ended 11/30/98
	None Yet